



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,300	01/31/2002	Lorinda R. Opsahl-Ong	G04.017	2021
67338 7590 01/05/2009 BUCKLEY, MASCHOFF & TALWALKAR, LLC GENERAL ELECTRIC COMPANY 50 LOCUST AVENUE NEW CANAAN, CT 06840				
EXAMINER BARTLEY, KENNETH				
ART UNIT 3693		PAPER NUMBER		
MAIL DATE 01/05/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/066,300

Applicant(s)

OPSAHL-ONG ET AL.

Examiner

KENNETH L. BARTLEY

Art Unit

3693

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8-9, 12-14 and 16-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-9, 12-14, 16-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 10, 2008 has been entered.

Response to Amendment

2. Claims 1, 16, and 19 are currently amended. Claims 6-7, 10-11, 15, and 20 have been previously canceled. Claims 1-5, 8-9, 12-14, and 16-19 are pending in the application and are provided to be examined upon their merits.
3. The Examiner also provides a new 35 USC 101 rejection based on recent guidelines.

Response to Arguments

4. Applicant's arguments with respect to claims 1-5, 8-9, 12-14, and 16-19 have been considered but are moot in view of the new ground(s) of rejection. Nevertheless, the Examiner provides a response below in **bold** where appropriate.

Applicant responds to claim objection:

Art Unit: 3693

Claim 16 was objected to in the Final Office Action dated July 11, 2008. Per the Advisory Action dated September 29, 2008, the Response and Amendment to the Final Office was entered by the Office. In that Response and Amendment, Applicant amended claim 16 to overcome the objection thereto. Applicant respectfully submits that the amended claim 16 overcame the objection of record.

Applicant therefore submits claim 16 no longer stands objected to by the Office.

Examiner thanks the Applicant and withdraws the minor objection to claim 16.

Applicant argues 35 USC § 103(a) rejection:

Claims 1 - 5, 8, 9, 12 - 14, and 16 - 19 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,823,319 to Lynch et al., in view of U.S. Publication No. 2002/0082903 A1 to Yasuzawa and in further view of Official Notice. This rejection is traversed.

Applicant reviews claim 1, starting page 9 of remarks:

Applicant notes that claim 1 relates to a method of generating return targets for potential real estate deals, the method including receiving prior real estate deal information from a prior deal data source; defining a rule-based pricing system based on an analysis of the received prior real estate deal information; determining a collateral type associated with a potential real estate deal; receiving supplemental deal information associated with the potential real estate deal; and automatically generating a base return target loan spread for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value. The claimed method further includes identifying a risk mitigant associated with the potential real estate deal based on the supplemental deal information; identifying a risk adder associated with the potential real estate deal based on the supplemental deal information; validating the rule-based system with additional prior real estate deal information; and automatically determining a return target loan spread for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder; and the validated rule-based system. Claims 16 and 19 are worded similar to claim 1.

Applicant argues combination of Lynch, Yasuzawa, and Official Notice, page 9:

Applicant respectfully submits that the cited and relied upon combination of Lynch, Yasuzawa, and the alleged Official Notice fails to disclose or suggest the claimed aspects of automatically generating a base return target loan spread for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system and automatically determining a return target loan spread for the potential real estate deal by

Art Unit: 3693

adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder.

Regarding the Yasuzawa disclosure, Applicant notes, Yasuzawa is not clearly written and/or logically discusses the concepts therein. Further, the Final Office Action (FOA) provides very little in the way of explaining what Yasuzawa means. Instead, the Office Action only states conclusions of obviousness using Applicant's claim language, stating motivation allegedly provided by Yasuzawa. Given the unclear meaning of Yasuzawa, the Office Action has failed to provide a prima facie case of obviousness.

The Examiner used Yasuzawa to provide internal rate of return (IRR) on real estate investments. IRR is very old and well known analysis tool for asset investment, as are NPV, and ROI. The Examiner respectfully submits that Yasuzawa is valid prior art as it teaches the very old and well known use of discounted cash flow analysis to real estate for making capital investment decisions.

Further, to illustrate this point (old and well known), the Examiner further cites Pub. No. US 2002/0123960 to Ericksen who teaches:

"The present invention then calculates an expected probability of default for a loan to that customer, and calculates custom loan terms that will deliver a minimum return on equity (e.g., 18%) given the lender's capital structure and funding rates." ¶ [0006]

"The following example calculates the absolute minimum spread a typical bank should be willing to accept on a "risk free" loan, based on shareholder return requirements and regulatory capital constraints."¶ [0036]

This teaches loan spread with investment return analysis is old and well known. Ericksen could also be combined with Lynch et al. to teach returns on investments.

Applicant respectfully submits that, as best understood given the quality of the cited and relied upon Yasuzawa, Yasuzawa is directed to an investment (Yasuzawa, [0041] as cited in the FOA) and investor analysis (Yasuzawa, [0049] as cited in the FOA). However, the pending claims are directed to automatically generating a base return target loan spread for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system and automatically determining a return target loan spread for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder.

Art Unit: 3693

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Lynch et al. provides an automated process of deal structuring, and teaches most of the elements of the claimed invention. What Lynch does not disclose is the very old and well known return targets, provided by Yasuzawa and others, such as Ericksen.

Additionally, the FOA takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI), net income, and loan spread analysis is old and well known. However, Applicant notes that the claims, as presently presented, do not claim "financial tools to analyze returns on investments, such as return on investment (ROI), net income, and loan spread analysis". Again, claims 1, 16, and 19 each include recitations to "automatically generating a base return target loan spread for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system and automatically determining a return target loan spread for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder."

The Examiner respectfully points out to the Applicant that the claim is now reciting "...a base return target loan spread..." and "...the return target being at least one of: (i) a return on investment value, (ii) a net income value...". The Examiner notes that these are two different types of returns (one return is a loan return, the others are investment returns), where the first is now calculating a loan spread (e.g. Fig. 5, 3.11% under "SPREAD" also in Fig. 6, ref. 612) and the second an investment return (e.g. Fig. 5, 2.13% under ROI). The Examiner wonders if claim 1, for example, should be "...automatically generating both a base return target loan spread and an investment return target for the potential... the investment return target being at least one of: (i) a return on investment value..."

Applicant concludes, bottom of page 10:

Applicant respectfully submits that the combination of Lynch, Yasuzawa, and the alleged Official Notice does not render claims 1, 16, and 19 obvious under 35 USC 103(a).

Therefore, Applicant respectfully submits that the combination of Lynch, Yasuzawa, and the Official Notice fails to disclose or suggest claims 1, 16, and 19, configured as claimed by Applicant. Applicant submits that the cited

Art Unit: 3693

references also fail to render the dependent claims 2 - 5, 7 - 14, 17, and 18 obvious. Thus, Applicant requests the reconsideration and withdrawal of the rejection under 35 USC 103(a).

The Examiner respectfully maintains the rejection based on the above arguments.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-5, 8-9, and 12-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

According to the recent Guidelines issued by the Deputy Commissioner, in order for a method claim to qualify as a patent eligible process under 35 USC § 101, the process of the method claim must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing.

In the instant case, none of the process steps of the method claims are tied to an apparatus such as a computer. Accordingly, the claimed invention fails to qualify as a statutory process under the Guidelines.

The applicant is requested to indicate where in the specification there is support for the amended claim.

Note: merely reciting a computer in the preamble does not meet the aforementioned requirement nor reciting a nominal process such as communicating data with a computer.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3693

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-5, 8-9, 12-14, and 16-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
8. Claim 1, for example, has "a base return target loan spread" and "the return target being at least one of (i) a return on investment..." where the returns are two different types (loan and investment) and therefore, an investment return, such as IRR, is not used as a loan spread. Independent claims 16 and 19 have similar issues. For purposes of examination, the Examiner assumes however Applicant means a loan spread. Claims 2-5, 8-9, 12-14, and 17-18 are rejected because they depend from their respective independent claims.

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
9. Claims 1-5, 8-9, 12-14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,823,319 to Lynch et al., in view of U.S. Pub. No. 2002/0082903 A1 to Yasuzawa and U.S. Pub. No. 2002/0123960 to Ericksen and in further view of Official Notice.

Regarding claim 1:

A method of generating return targets for potential real estate deals, comprising:

Lynch et al. discloses:

A deal processing system that can be used for real estate deals...

"The automated process of deal structuring benefits the potential borrower by providing the ability to easily explore different deal scenarios, as well as

Art Unit: 3693

greatly reducing the amount of time required to obtain approval of a mortgage loan.” (col. 2, lines 25-29);

receiving prior real estate deal information from a prior deal data source;

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60)

defining a rule-based pricing system based on an analysis of the received prior real estate deal information;

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60) The score provides a rule based on prior real estate deal information.

determining a collateral type associated with a potential real estate deal;

Where the deal processing includes...

“...prompting the customer for information relating to the customer, such as collateral offered by the customer...” (col. 1, lines 61-63);

receiving supplemental deal information associated with the potential real estate deal;

With the ability to receive supplemental deal information associated with the real estate deal...

“...accessing in real-time information relating to the credit history of the customer...” (col. 1, lines 63-64), where supplemental deal information has been defined in Applicant’s specification as not collateral or loan-to-value information.

automatically generating a base return target loan spread for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value.

Provides the ability to evaluate deals using “exclusionary rules”...

“The MSS 108, resident on the DSS 100, preferably includes rules 210, and modules 220. One example of MSS rules 210 is own products

Art Unit: 3693

exclusionary rules and third party, such as independent investors, exclusionary rules, for application to the information entered by a customer in a deal structuring.” (col. 5, lines 1-7) The DSS is the “Deal Structure System” and the MSS is the “Mortgage System Software.” Also, “The application of the exclusionary rules may be accomplished by numerous other methods, which methods will be apparent to those skilled in the art.” (col. 9, lines 19-21)

identifying a risk mitigant associated with the potential real estate deal based on the supplemental deal information;

“A preferred loan option is generated 336 by selecting from the offeror’s available product types those products whose rules are satisfied by the elements stored in the deal structuring record.” (col. 9, lines 55-58)

identifying a risk adder associated with the potential real estate deal based on the supplemental deal information;

“Other factors which might disqualify options might include credit grades differing from the allowable range for the option, differing input documentation level from that allowable for the option, and/or differing lien positions from those allowable for the option, for example.” (col. 9, lines 8-13)

validating the rule-based system with additional prior real estate deal information; and

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60) Inherent in maintaining an empirical database and generating risk-based pricing would be using the information to validate the rule-based system with prior real estate deal information.

automatically determining a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified risk adder; and the validated rule-based system.

“If no preferred options are identified following this procedure, pricing and/or risk rules, such as compensating rules 330 and/or repair rules 332, can be applied to attempt to gain an option that is acceptable to the offeror or offerors.” (col. 10, lines 26-29) Also, above teaches generating (creating) risk-based pricing based on historical information.

While Lynch et al., in the business of real estate systems, considers returns from rental income, they do not disclose return targets, such as internal rate of return.

Yasuzawa, in the field of real estate systems and return analysis, discloses:

"For the purpose, the benchmark is required when investors makes investment judgment. Benchmark in real estate investment is Real Estate Index that shows a return of the investment including income and capital gain." ¶ [0041]

"Because, on the occasion of actual dealings, the investor analyzes return and make investment by the price based on the return." ¶ [0049]

"It is desirable that the aforesaid matrix evaluation (assessment) includes the DCF method, and that the aforesaid yield is presented together with the deduction rate used by the DCF method, the terminal rate, and one or more yields selected from a set consisting of yields calculated from profitable prices obtained by the DCF method (called IRR or internal rate of return)." ¶ [0103]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a return target based on an internal rate of return, motivated by Yasuzawa, and that the analysis would aid the investor in making educated investment decisions based on capital expenditures, such as for rental property.

Also, while the combined above references of Lynch et al. and Yasuzawa teach real estate investments and returns, they do not teach loan spreads. Ericksen, also in the business of real estate investments teaches:

"The invention then calculates an expected probability of default for a loan to that customer, and calculate loan terms that will deliver a minimum return on equity (e.g., 18%) given the lender's capital structure and funding rates." (Abstract)

"The following example calculates the absolute minimum spread a typical bank should be willing to accept on a "risk free" loan, based on shareholder return requirements and regulatory capital constraints. It provides a consistent floor for all loan-pricing decisions that will not vary over the credit cycle." [0036]

"The credit spread over the risk free rate is the additional yield required to compensate for default risk. Using the computations above the custom loan manager 20 can offer personalized interest

rates to customer given a default rate associated with the customer.”
[0048]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to consider loan (credit) spreads motivated by Ericksen, and that this would be a further aid for an investor in making educated investment decisions compared to risk free returns.

Also, while the references as combined above disclose an internal rate of return, they do not provide details regarding other tools for financial analysis of capital expenditures. However, the Examiner takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI) and net income is old and well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to determine investment returns using financial analysis techniques, and that such techniques would be useful to determine desired investment returns.

Regarding claim 2:

The method of claim 1, wherein the potential real estate deal comprises one of: (i) a debt deal, and (ii) an equity deal.

Lynch et al. discloses:

The deal can involve a mortgage, which is a debt deal (col. 2, lines 25-26).

Regarding claim 3:

The method of claim 1, wherein the potential real estate deal comprise a debt deal, said determining further comprises determining loan-to-value information associated with the potential real estate deal, and said generating is further based on the loan-to-value information.

Lynch et al. discloses:

“Forming the record also generates standardized parameters for the deal structuring, such as maximum allowable loan-to-value (LTV) and debt-to-income (DTI) ratios. The combined preferred parameters, potential collateral data, customer suitability information, credit history, and collateral appraisal information can then be joined to form an deal structuring record.” (col. 8, lines 54-60)

Regarding claim 4:

The method of claim 1, wherein the potential real estate deal is associated with at least one of: (i) a commercial real estate property, (ii) a commercial real estate portfolio, (iii) a loan, (iv) a mortgage, (v) a commercial mortgage backed security, (vi) a leveraged equity deal, (vii) a full equity purchase, and (viii) an adjustment to an existing real estate deal.

Lynch et al. discloses:

Art Unit: 3693

A potential deal can be associated with a mortgage, where...“The automated process of deal structuring benefits the potential borrower by providing the ability to easily explore different deal scenarios, as well as greatly reducing the amount of time required to obtain approval of a mortgage loan.” (col. 2, lines 25-29).

Regarding claim 5:

The method of claim 1, wherein the supplemental deal information comprises at least one of: (i) a risk characteristic, (ii) deal size information, (iii) deal term information, (iv) a number of properties, (v) collateral quality information, (vi) a risk rating, (vii) lockbox information, (viii) sweep trigger information, (ix) rate cap information, (x) customer information, (xi) earn-out information, (xii) subordinated debt information, (xiii) interest reserve information, (xiv) renovation information, (xv) ground lease information, (xvi) portfolio cross-collateralization information, (xvii) credit tenant information, (xviii) annual rollover information, (xix) leverage information, (xx) development deal information, and (xi) partnership structure information.

Lynch et al. discloses:

“...applying a plurality of origination rules, such as exclusionary rules, pricing rules, risk rules, and edit preference rules, to the at least one deal parameter and the information relating to the customer...” (col. 1, lines 64-67)

Regarding claim 8:

The method of claim 1, further comprising:

creating the rule-based system in accordance with a statistical analysis of prior real estate deal information.

Lynch et al. discloses:

“...a knowledge base is a collection of rules that represent the human expertise of a particular knowledge domain. Rules are typically constructed in an IF-THEN-ELSE format, e.g., IF Property Type=High Rise AND State=NY THEN Proceed ELSE Flag For Review. The knowledge base is typically stored in a storage medium of a computer.” (col. 3, lines 10-16)

“An expert system operates by running a knowledge base through an inference engine and applying all of the rules to the input data for a given problem.” (col. 3, lines 18-21)

Therefore, it would be inherent for a “collection of rules that represent the human expertise of a particular knowledge domain” to include prior real estate deal information, and that such information could include credit risk history of individuals (col. 1, lines 63-64).

Art Unit: 3693

Regarding claim 9:

The method of claim 1, wherein said creating comprises:
creating the rule-based system in accordance with at least one of: (i) risk characteristics and approved return values for a plurality of prior real estate deals, and (ii) expert information.

Lynch et al. discloses:

"In addition, the illustrated DSS system 100 may include at least one third party interface, for third parties such as credit bureaus and third party loan offerors." (col. 4, lines 57-58)

Regarding claim 12:

The method of claim 1, further comprising:
transmitting an indication of the return target to a deal originator device via a communication network.

Lynch et al. discloses:

A networked communication system (Fig. 1):

"The computer 102 also has several interchanges, such as interfaces, for communicating with other entities. These interfaces include an internet interface 112 for communicating with customers 114 accessing the DSS 100." (col. 4, lines 40-43)

Regarding claim 13:

The method of claim 12, wherein the deal originator device comprises at least one of: (i) a personal computer, (ii) a portable computing device, and (iii) a telephone device.

Lynch et al. discloses:

"The network computers 118 can be located in a facility operated in conjunction with DSS 100, such that loan customers can access the system without having Internet access. The system also has a telephone interface 120, such that customers can dial into the system to access DSS 100." (col. 4, lines 45-53)

Regarding claim 14:

The method of claim 12, wherein the communication network comprises at least one of: (i) the Internet, (ii) an intranet, (iii) a public network, (iv) a public switched telephone network, (v) a proprietary network, (vi) a wireless network, and (vii) a local area network.

Lynch et al. discloses:

Use of an internet (col. 4, lines 40-43).

Regarding claim 16:

A deal controller, comprising:
a processor; and

Lynch et al. discloses:

Art Unit: 3693

A “Deal Structuring System” (Fig. 1, ref. 100) with a processor (Fig. 1, ref. 104);

a storage device in communication with said processor and storing instructions adapted to be executed by said processor to:

a database (Fig. 1, ref. 110) in communication with a processor, that has memory to store the “Mortgage System Software” (col. 4, lines 27-32);

receive prior real estate deal information from a prior deal data source;

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60)

define a rule-based pricing system based on an analysis of the received prior real estate deal information.

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60)

determine a collateral type associated with a potential real estate deal,

“The combined preferred parameters, potential collateral data, customer suitability information, credit history, and collateral appraisal information can then be joined to form an deal structuring record. Once the deal structuring record has been completed, exclusionary rules can be iteratively applied 332 to the deal structuring record to determine whether the offering of a product to the customer should be excluded based on the contents of the record.” (col. 8, lines 57-65)

receive supplemental deal information associated with the potential real estate deal,

“The exclusionary rules are discussed hereinabove, and can include exclusions based on... the credit history of the borrower, for example” (col. 8, lines 65-67 and col. 9, line 1), where supplemental deal information has been defined in Applicant’s specification as not collateral or loan-to-value information.

Art Unit: 3693

automatically generate a base return target for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value.

And provides the ability to evaluate deals using "exclusionary rules"...

"The MSS 108, resident on the DSS 100, preferably includes rules 210, and modules 220. One example of MSS rules 210 is own products exclusionary rules and third party, such as independent investors, exclusionary rules, for application to the information entered by a customer in a deal structuring." (col. 5, lines 1-7) The DSS is the "Deal Structure System" and the MSS is the "Mortgage System Software." Also, "The application of the exclusionary rules may be accomplished by numerous other methods, which methods will be apparent to those skilled in the art." (col. 9, lines 19-21)

identify a risk mitigant associated with the potential real estate deal based on the supplemental deal information;

"A preferred loan option is generated 336 by selecting from the offeror's available product types those products whose rules are satisfied by the elements stored in the deal structuring record." (col. 9, lines 55-58)

identify a risk adder associated with the potential real estate deal based on the supplemental deal information;

"Other factors which might disqualify options might include credit grades differing from the allowable range for the option, differing input documentation level from that allowable for the option, and/or differing lien positions from those allowable for the option, for example." (col. 9, lines 8-13)

validate the rule-based system with additional prior real estate deal information; and

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60) Inherent in maintaining an empirical database and generating risk-based pricing would be using information to validate the rule-based system with prior real estate deal information.

automatically determine a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant the identified and risk adder, and the validate the rule-based system.

"If no preferred options are identified following this procedure, pricing and/or risk rules, such as compensating rules 330 and/or repair rules 332, can be applied to attempt to gain an option that is acceptable to the offeror or offerors." (col. 10, lines 26-29) Also, above teaches generating (creating) risk-based pricing based on historical information.

While Lynch et al. discloses a real estate system and considers returns from rental income, for example, they do not disclose a return targets, such as internal rate of return.

Yasuzawa, in the field of real estate systems and return analysis, discloses:

"For the purpose, the benchmark is required when investors makes investment judgment. Benchmark in real estate investment is Real Estate Index that shows a return of the investment including income and capital gain." ¶ [0041]

"Because, on the occasion of actual dealings, the investor analyzes return and make investment by the price based on the return." ¶ [0049]

"It is desirable that the aforesaid matrix evaluation (assessment) includes the DCF method, and that the aforesaid yield is presented together with the deduction rate used by the DCF method, the terminal rate, and one or more yields selected from a set consisting of yields calculated from profitable prices obtained by the DCF method (called IRR or internal rate of return)." ¶ [0103]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a return target based on internal rate of return, motivated by Yasuzawa, and that analysis would apply financial principals for making investment decisions based n capital expenditures, such as for rental property.

Also, while the combined above references of Lynch et al. and Yasuzaw teach real estate investments and returns, they do not teach loan spreads. Ericksen, also in the business of real estate investments teaches:

"The invention then calculates an expected probability of default for a loan to that customer, and calculate loan terms that will deliver a minimum return on equity (e.g., 18%) given the lender's capital structure and funding rates." (Abstract)

"The following example calculates the absolute minimum spread a typical bank should be willing to accept on a "risk free" loan, based on shareholder return requirements and regulatory capital

constraints. It provides a consistent floor for all loan-pricing decisions that will not vary over the credit cycle.” [0036]

“The credit spread over the risk free rate is the additional yield required to compensate for default risk. Using the computations above the custom loan manager 20 can offer personalized interest rates to customer given a default rate associated with the customer.” [0048]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to consider loan (credit) spreads motivated by Ericksen, and that this would be a further aid for an investor in making educated investment decisions compared to risk free returns.

Also, while the references as combined above disclose an internal rate of return, they do not provide details regarding other tools for financial analysis of capital expenditures. However, the Examiner takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI), and net income is old and well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to determine investment returns using financial analysis techniques, and that such techniques would be useful to determine desired investment returns.

Regarding claim 17:

The deal controller of claim 16, wherein said storage device further stores at least one of: (i) a prior deal database, and (ii) a potential deal database.

Lynch et al. discloses:

A deal processing system that can be used for real estate deals...

“The automated process of deal structuring benefits the potential borrower by providing the ability to easily explore different deal scenarios, as well as greatly reducing the amount of time required to obtain approval of a mortgage loan.” (col. 2. lines 25-29).

“The memory is also used to store data regarding each deal structuring. This information can be stored in a database 110 within the memory 106.” (col. 4, lines 35-37)

Therefore, the deal processing system is able to perform analysis on “potential deals,” where the deal structuring information can be stored on a database.

Regarding claim 18:

Art Unit: 3693

The deal controller of claim 16, wherein said processor is further coupled to a communication device adapted to communicate with at least one of: (i) a deal originator device, and (ii) another deal controller.

Lynch et al. discloses:

"The computer 102 also has several interchanges, such as interfaces, for communicating with other entities. These interfaces include an internet interface 112 for communicating with customers 114 accessing the DSS 100. (col. 4, lines 40-43). Therefore, the processor is coupled to a communication device to communicate with a deal originator device (Fig. 1, ref. 104 and 114).

Regarding claim 19

(Currently Amended) A medium storing instructions adapted to be executed by a processor to perform a method of generating return targets for potential real estate deals, said method comprising:

Lynch et al. discloses:

"Alternatively, MSS 108 may be stored on a removable computer readable medium, such as a CD-ROM (not shown)." (col. 4, lines 32-34)

receiving prior real estate deal information from a prior deal data source;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60)

defining a rule-based pricing system based on an analysis of the received prior real estate deal information;

"Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing." (col. 12, lines 53-60)

determining a collateral type associated with a potential real estate deal;

"The combined preferred parameters, potential collateral data, customer suitability information, credit history, and collateral appraisal information can then be joined to form an deal structuring record. Once the deal structuring record has been completed, exclusionary rules can be iteratively applied 332 to the deal structuring record to determine whether

Art Unit: 3693

the offering of a product to the customer should be excluded based on the contents of the record.” (col. 8, lines 57-65)

receiving supplemental deal information associated with the potential real estate deal;

“The exclusionary rules are discussed hereinabove, and can include exclusions based on... the credit history of the borrower, for example.” (col. 8, lines 65-67 and col. 9, line 1), where supplemental deal information has been defined in Applicant’s specification as not collateral or loan-to-value information.

automatically generating a base return target for the potential real estate deal based on applying the collateral type and the supplemental deal information to the rule-based pricing system, the return target being at least one of: (i) a return on investment value, (ii) a net income value, (iii) an internal rate of return value, and (iv) a loan spread value.

Provides the ability to evaluate deals using “exclusionary rules”...

“The MSS 108, resident on the DSS 100, preferably includes rules 210, and modules 220. One example of MSS rules 210 is own products exclusionary rules and third party, such as independent investors, exclusionary rules, for application to the information entered by a customer in a deal structuring.” (col. 5, lines 1-7) The DSS is the “Deal Structure System” and the MSS is the “Mortgage System Software.” Also, “The application of the exclusionary rules may be accomplished by numerous other methods, which methods will be apparent to those skilled in the art.” (col. 9, lines 19-21)

identifying a risk mitigant associated with the potential real estate deal based on the supplemental deal information;

“A preferred loan option is generated 336 by selecting from the offeror’s available product types those products whose rules are satisfied by the elements stored in the deal structuring record.” (col. 9, lines 55-58)

identifying a risk adder associated with the potential real estate deal based on the supplemental deal information;

“Other factors which might disqualify options might include credit grades differing from the allowable range for the option, differing input documentation level from that allowable for the option, and/or differing lien positions from those allowable for the option, for example.” (col. 9, lines 8-13)

validating the rule-based system with additional prior real estate deal information; and

“Additionally, it will be apparent to those skilled in the art that, over time, an empirical database of compensation and/or repair strategies implemented, successful, and failed may be built, and, following the building of the empirical compensation and/or repair database, an

empirical database score may replace the assignment of factors as discussed hereinabove, thus generating true risk-based pricing.” (col. 12, lines 53-60) Inherent in maintaining an empirical database and generating risk-based pricing would be using information to validate the rule-based system with prior real estate deal information.

automatically determining a return target for the potential real estate deal by adjusting the generated base return target in accordance with the identified risk mitigant and risk, and the rule-based system.

“If no preferred options are identified following this procedure, pricing and/or risk rules, such as compensating rules 330 and/or repair rules 332, can be applied to attempt to gain an option that is acceptable to the offeror or offerors.” (col. 10, lines 26-29) Also, above teaches generating (creating) risk-based pricing based on historical information.

While Lynch et al. discloses a real estate system and considers returns from rental income, for example, they do not disclose a return targets, such as internal rate of return.

Yasuzawa, in the field of real estate systems and return analysis, discloses:

“For the purpose, the benchmark is required when investors makes investment judgment. Benchmark in real estate investment is Real Estate Index that shows a return of the investment including income and capital gain.” ¶ [0041]

“Because, on the occasion of actual dealings, the investor analyzes return and make investment by the price based on the return.” ¶ [0049]

“It is desirable that the aforesaid matrix evaluation (assessment) includes the DCF method, and that the aforesaid yield is presented together with the deduction rate used by the DCF method, the terminal rate, and one or more yields selected from a set consisting of yields calculated from profitable prices obtained by the DCF method (called IRR or internal rate of return).” ¶ [0103]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to provide a return target based on internal rate of return, motivated by Yasuzawa, and that analysis would apply financial principals for making investment decisions based on capital expenditures, such as for rental property.

Also, while the combined above references of Lynch et al. and Yasuzaw teach real estate investments and returns, they do not teach loan spreads.

Ericksen, also in the business of real estate investments teaches:

"The invention then calculates an expected probability of default for a loan to that customer, and calculate loan terms that will deliver a minimum return on equity (e.g., 18%) given the lender's capital structure and funding rates." (Abstract)

"The following example calculates the absolute minimum spread a typical bank should be willing to accept on a "risk free" loan, based on shareholder return requirements and regulatory capital constraints. It provides a consistent floor for all loan-pricing decisions that will not vary over the credit cycle." [0036]

"The credit spread over the risk free rate is the additional yield required to compensate for default risk. Using the computations above the custom loan manager 20 can offer personalized interest rates to customer given a default rate associated with the customer." [0048]

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to consider loan (credit) spreads motivated by Ericksen, and that this would be a further aid for an investor in making educated investment decisions compared to risk free returns.

Also, while the references as combined above disclose an internal rate of return, they do not provide details regarding other tools for financial analysis of capital expenditures. However, the Examiner takes Official Notice that using various financial tools to analyze returns on investments, such as return on investment (ROI) and net income is old and well known. Therefore, it would have been obvious to one skilled in the art at the time of invention to determine investment returns using financial analysis techniques, and that such techniques would be useful to determine desired investment returns.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH L. BARTLEY whose telephone number is (571)272-5230. The examiner can normally be reached on Monday through Friday, 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jagdish Patel can be reached on (571) 272-6748. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAGDISH N PATEL/

Primary Examiner, Art Unit 3693